

# Exhibit 2

**Infringement Claim Chart for U.S. Pat. No. US7130430B2 v. Polk Audio (“Defendant”)**  
 (See Accused Product List at end of chart for models)

Claim 2	Evidence
<p>2. A speaker system for producing localized regions of sound comprising:</p>	<p>The MagniFi Max AX SR is a speaker system for producing localized regions of sound.</p> <p>For example, the MagniFi Max AX SR soundbar produces a surround sound effect. The surround sound effect causes a listener facing the soundbar to perceive that sound emanating from the soundbar is originating at a location behind and to the left of the listener, referred to as surround left, and at another location behind and to the right of the listener, referred to as surround right.</p> <div data-bbox="766 656 1617 1331" data-label="Image"> </div>

	<div data-bbox="785 233 1625 672"> <p><u>MOVIE, TV, MUSIC, AND NIGHT MODES</u></p> <h2><u>OPTIMIZE SOUND FOR ANY LISTENING EXPERIENCE</u></h2> <p>One-click modes optimize bass, clarity, and soundstage for movies, TV, or music. Night Mode turns up dialogue and turns down bass for late-night watching without disturbing the neighbors.</p> </div> <div data-bbox="827 688 1583 1062"> <h2><u>EXPERIENCE MOVIES, MUSIC, AND GAMES IN TRUE DOLBY ATMOS/DTS:X SOUND</u></h2> <p><u>An 11-driver array with built-in height drivers and two wireless surrounds works with Polk's patented SDA technology to deliver immersive 7.1.2 Dolby Atmos and DTS:X 3D sound with a lifelike, expansive soundstage.</u></p> </div> <p>Source: <a href="https://www.polkaudio.com/en-us/product/sound-bars/magnifi-max-ax-sr/300543.html">https://www.polkaudio.com/en-us/product/sound-bars/magnifi-max-ax-sr/300543.html</a></p>
<p>a multiplicity of audio frequency speakers;</p>	<p>The MagniFi Max AX SR soundbar includes a multiplicity of audio frequency speakers.</p> <p>For example, the MagniFi Max AX SR soundbar includes multiple full-range audio speakers positioned along a front face of the soundbar.</p>

	<div data-bbox="827 269 1575 639"> <p><b><u>EXPERIENCE MOVIES, MUSIC, AND GAMES IN TRUE DOLBY ATMOS/DTS:X SOUND</u></b></p> <p><u>An 11-driver array with built-in height drivers and two wireless surrounds works with Polk's patented SDA technology to deliver Immersive 7.1.2 Dolby Atmos and DTS:X 3D sound with a lifelike, expansive soundstage.</u></p> </div> <div data-bbox="882 656 1524 987"> <p><b>BRING MOVIES, TV, MUSIC, AND GAMES TO LIFE IN 7.1.2 DOLBY ATMOS AND DTS:X SOUND WITH OUR SDA-OPTIMIZED, <u>11-SPEAKER SOUND BAR</u>, <u>WIRELESS SURROUNDS AND SUBWOOFER</u>. INCLUDES WI-FI AND BLUETOOTH MUSIC STREAMING.</b></p> </div> <p>Source: <a href="https://www.polkaudio.com/en-us/product/sound-bars/magnifi-max-ax-sr/300543.html">https://www.polkaudio.com/en-us/product/sound-bars/magnifi-max-ax-sr/300543.html</a></p>
<p>at least one defined sound target spaced from each of the speakers of the multiplicity of</p>	<p>The MagniFi Max AX SR has at least one defined sound target spaced from each of the speakers of the multiplicity of speakers. Each speaker has a means for applying a time varying audio drive voltage which is substantially identical, except that each audio drive voltage is offset in time by an amount which is related to the distance between each speaker and the defined sound target. So that substantially identical sound from each speaker reaches the sound target at the same time.</p>

speakers, wherein each speaker has a means for applying a time varying audio drive voltage which is substantially identical, except that each audio drive voltage is offset in time by an amount which is related to the distance between each speaker and the defined sound target, so that substantially identical sound from each speaker reaches the sound target at the same time;

For example, each of the MagniFi Max AX SR speakers is connected to an audio amplifier. A surround left channel signal is provided to each speaker via the speaker's respective amplifier. The surround left channel is delayed slightly for speakers on the listener's left compared to speakers on the listener's right. The amount of delay is such that sound waves emanating from each of the speakers reach the surround left location at the same time, thereby interfering constructively to produce a resultant sound wave having peak spatial amplitude at the surround left location. When this wave reflects back to the listener, the listener perceives that the sound originated from the surround left location.

**BRING MOVIES, TV, MUSIC, AND GAMES TO LIFE  
IN 7.1.2 DOLBY ATMOS AND DTS:X SOUND WITH  
OUR SDA-OPTIMIZED, 11-SPEAKER SOUND BAR,  
WIRELESS SURROUNDS AND SUBWOOFER.  
INCLUDES WI-FI AND BLUETOOTH MUSIC  
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**EXPERIENCE MOVIES, MUSIC, AND GAMES IN  
TRUE DOLBY ATMOS/DTS:X SOUND**

An 11-driver array with built-in height drivers and  
two wireless surrounds works with Polk's patented  
SDA technology to deliver immersive 7.1.2 Dolby  
Atmos and DTS:X 3D sound with a lifelike, expansive  
soundstage.

MAGNIFI MAX AX SR

## FILL THE ROOM WITH SOUND ALL AROUND YOU

### TRUE ATMOS AND DTS:X HEIGHT SOUND →

Bring cinematic sound to new heights with MagniFI Max AX's up-firing drivers, which provide the critical overhead element of Atmos and DTS:X sound. Rain will never sound the same.

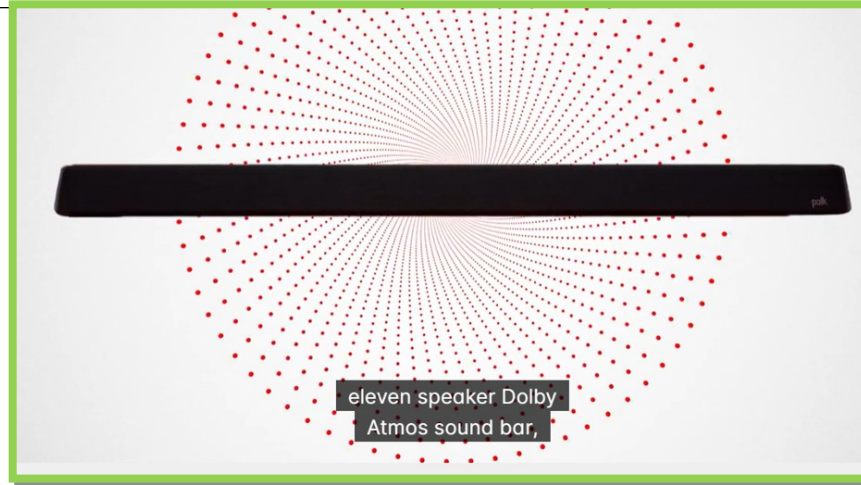
### ENJOY AN IMMERSIVE AUDIO EXPERIENCE →

### 10" SUBWOOFER BRINGS MASSIVE BASS →

POLK VOICEADJUST™

## HEAR EVERY WORD

Never miss a word of dialogue again. Polk's patented VoiceAdjust™ speech-clarifying technology works with MagniFI's integrated center-channel speaker to bring up the volume of voices over other elements of the soundtrack.



Source: <https://www.polkaudio.com/en-us/product/sound-bars/magnifi-max-ax-sr/300543.html>

at least a first defined sound target and a second defined sound target, the second sound target being spaced from the first sound target, and the first sound target and the second sound target

The MagniFi Max AX SR soundbar has at least a first defined sound target and a second defined sound target. The second sound target is spaced from the first sound target. The first sound target and the second sound target are spaced from each of the speakers.

For example, the MagniFi Max AX SR soundbar speaker surround left location is at a rear position on a left-side wall of a nominally sized room. The omni-direction speaker surrounds multiple location i.e., right location is at a rear position on the right-side wall of the room. Additionally, the VoiceAdjust™ feature enables the soundbar to adapt to the dimensions of the room.



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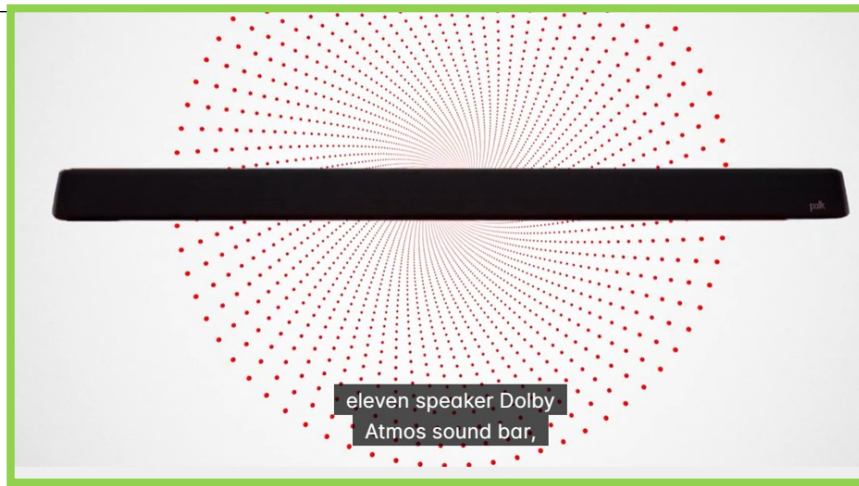
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and wherein the means for applying a time varying audio drive voltage comprises:  
at least a first audio source which is offset in time by an amount which is related to the distance between each

The means for applying a time varying audio drive voltage comprises at least a first audio source which is offset in time by an amount which is related to the distance between each MagniFi Max AX SR soundbar and the first defined sound target.

For example, a delay is added to the surround left channel (e.g. first audio source) before it is applied to a MagniFi Max AX SR soundbar on the left-side of the soundbar, as viewed from the listener's position. The delay relates to the distance between the speaker and the surround left location in the nominally sized room, whereby the speaker closest to the surround left location has the most delay.

<p>speaker and the first defined sound target; and</p>	<div data-bbox="829 235 1585 625"><p><b>BRING MOVIES, TV, MUSIC, AND GAMES TO LIFE IN 7.1.2 DOLBY ATMOS AND DTS:X SOUND WITH OUR SDA-OPTIMIZED, <u>11-SPEAKER SOUND BAR, WIRELESS SURROUNDS AND SUBWOOFER.</u> INCLUDES WI-FI AND BLUETOOTH MUSIC STREAMING.</b></p></div> <div data-bbox="829 641 1585 1015"><p><b><u>EXPERIENCE MOVIES, MUSIC, AND GAMES IN TRUE DOLBY ATMOS/DTS:X SOUND</u></b></p><p><u>An 11-driver array with built-in height drivers and two wireless surrounds works with Polk's patented SDA technology to deliver immersive 7.1.2 Dolby Atmos and DTS:X 3D sound with a lifelike, expansive soundstage.</u></p></div>
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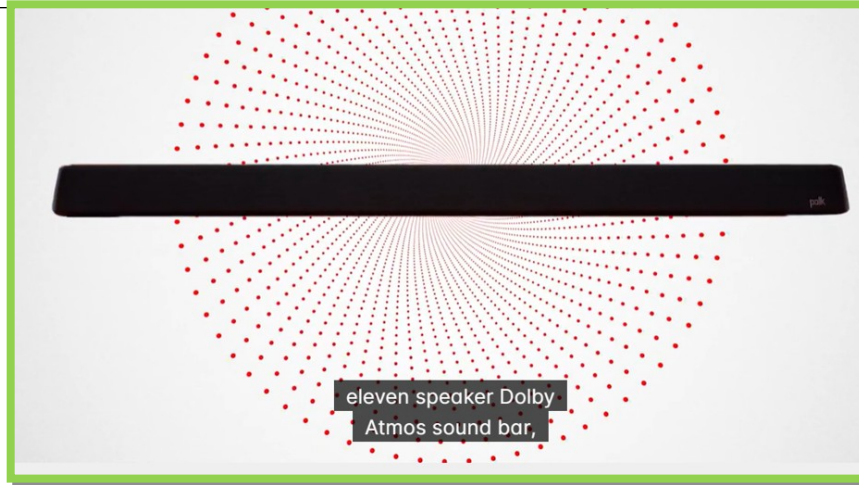
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at least a second audio source which is offset in time by an amount which is related to the distance between each speaker and the second defined sound target wherein a sum of the first audio source which is

The MagniFi Max AX SR soundbar includes at least a second audio source which is offset in time by an amount which is related to the distance between each speaker and the second defined sound target. The sum of the first audio source and the second audio source is used to produce the time varying audio drive voltage. Substantially identical sound from the first audio source signal reaches the first sound target at the same time, and substantially identical sound from the second audio source signal reaches the second target at the same time.

For example, a delay is added to the surround right channel (e.g. second audio source) before it is applied to a speaker on the right-side of the soundbar. The delay relates to the distance between the speaker and the surround right location, whereby the speaker closest to the surround right location has the most delay. Each speaker is provided, via its amplifier, with a surround left channel signal and a surround right channel signal, each signal having a respective delay. The signals are added together before being input

<p>offset in time and the second audio source which is offset in time is used to produce the time varying audio drive voltage so that substantially identical sound from the first audio source signal reaches the first sound target at the same time, and substantially identical sound from the second audio source signal reaches the second target at the same time.</p>	<p>to the respective amplifier. Consequently, each MagniFi Max AX SR soundbar emits a sound wave comprising audio from the surround left channel and from the surround right channel, the audio from each channel having an appropriate amount of delay such that the surround left audio reaches the surround left location at the same time as the surround right audio reaches the surround right location.</p> <div data-bbox="837 482 1558 807"> <p><b>BRING MOVIES, TV, MUSIC, AND GAMES TO LIFE IN 7.1.2 DOLBY ATMOS AND DTS:X SOUND WITH OUR SDA-OPTIMIZED, <u>11-SPEAKER SOUND BAR</u>, <u>WIRELESS SURROUNDS AND SUBWOOFER</u>. INCLUDES WI-FI AND BLUETOOTH MUSIC STREAMING.</b></p> </div> <div data-bbox="871 894 1522 1201"> <p><b><u>EXPERIENCE MOVIES, MUSIC, AND GAMES IN TRUE DOLBY ATMOS/DTS:X SOUND</u></b>  <u>An 11-driver array with built-in height drivers and two wireless surrounds works with Polk's patented SDA technology to deliver immersive 7.1.2 Dolby Atmos and DTS:X 3D sound with a lifelike, expansive soundstage.</u></p> </div>
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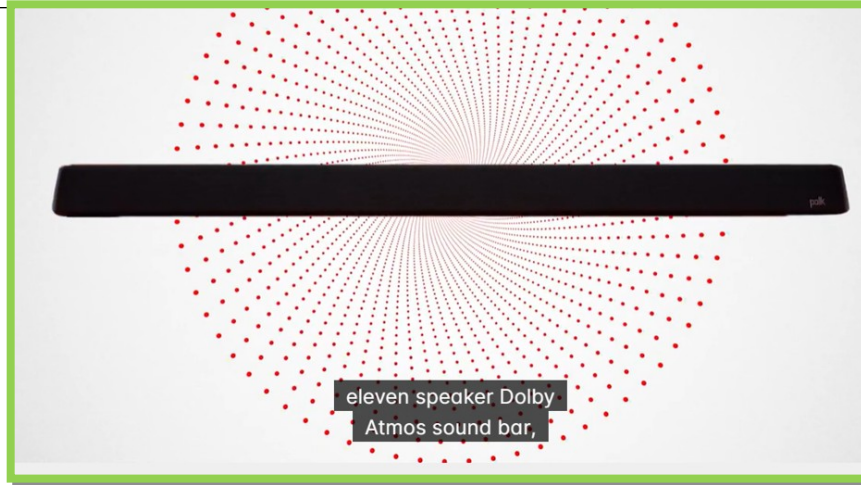
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### **Accused Product List**

Dolby Atmos Sound Bars  
MagniFi Max AX SR  
MagniFi Max AX  
Magnifi Mini AX  
Signa S4D  
Signa S4

### **References**

- [1] Dolby Atmos Sound Bars  
<https://www.polkaudio.com/en-us/category/dolby-atmos-sound-bars/>
- [2] MagniFi Max AX SR

<https://www.polkaudio.com/en-us/product/sound-bars/magnifi-max-ax-sr/300543.html>

[3] MagniFi Max AX

<https://www.polkaudio.com/en-us/product/sound-bars/magnifi-max-ax/300542.html>

[4] Magnifi Mini AX

<https://www.polkaudio.com/en-us/product/sound-bars/magnifi-mini-ax/300410-new.html>

[5] Signa S4D

<https://www.polkaudio.com/en-us/product/sound-bars/signa-s4d/300732.html>

[6] Signa S4

<https://www.polkaudio.com/en-us/product/sound-bars/signa-s4/300443-new.html>